

# Rapid shutdown is built-in

The 2014 edition of the National Electrical Code (NEC 2014) added new rapid shutdown requirements for PV systems installed on buildings. Enphase Microinverters fully meet rapid shutdown requirements in the new code without the need to install any additional electrical equipment.

## What's new in NEC 2014?

NEC 2014, Section 690.12 applies to PV conductors over 10 feet from the PV array and requires that the conductors power down to 30 volts and 240 volt-amperes within 10 seconds of rapid shutdown initiation.

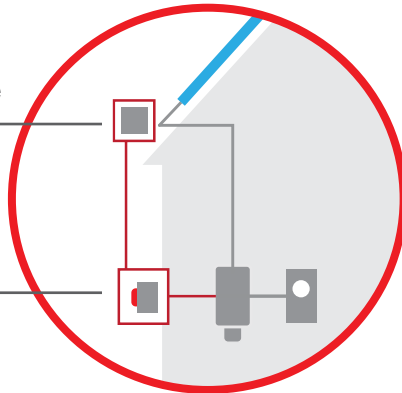
## String inverters require work arounds for rapid shutdown

### Work around.

Specialized Rapid Shutdown electrical box installed on the roof within 10 feet of array.

### Work around.

Shutoff switch that is easily accessible to first responders on the ground.



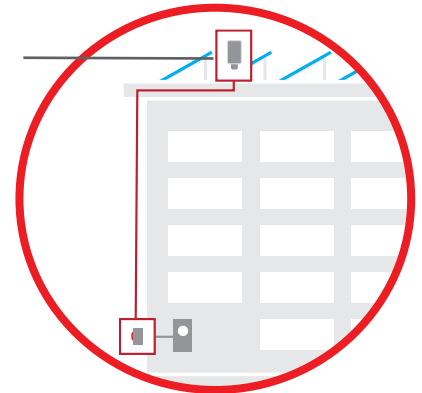
**Residential String Inverter**

### Work around.

Extra conduit in installation.

### Work around.

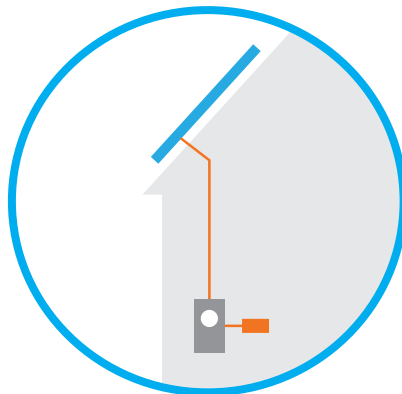
String inverter installed on roof, a hostile environment that string inverters are not built to live in.



**Commercial String Inverter**

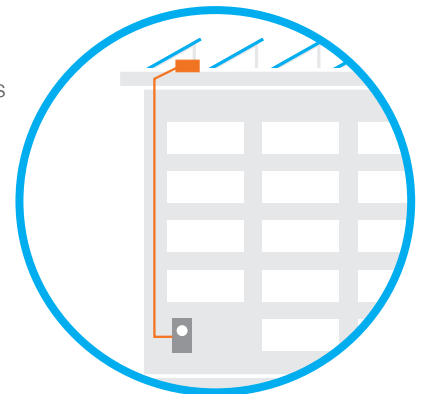
## Enphase comes standard with rapid shutdown capability

All Enphase microinverters, even those that were previously installed, inherently meet rapid shutdown requirements, no additional equipment or workarounds needed



**Residential Microinverter**

Enphase microinverters can safely shut down automatically, leaving only low-voltage DC electricity isolated to the PV module



**Commercial Microinverter**